

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of monitoring traffic in a network comprising the steps of:
receiving at least one data packet at a network interface, said network interface comprising:
 - a) a first module handling communications between the network and a host, and
 - b) at least one programmable processing module in communication with said first module; andprocessing information in the at least one data packet using the at least one programmable processing module to generate network information, wherein the first module ~~can~~ passes parameters to the at least one programmable processing module, thereby changing the processing performed by the at least one programmable processing module.
2. (Previously presented) The method of claim 1 wherein the network information can be relayed from the network interface to the host.
3. (Previously presented) The method of claim 1 wherein the at least one programmable processing module is generated from a processing query expressed in a high-level language.
4. (Previously presented) The method of claim 3 wherein the processing query accesses functions defined in the first module.
5. (Previously presented) The method of claim 1 wherein the network information is condensed statistics of network performance.

6. (Previously presented) The method of claim 1 wherein the at least one programmable processing module performs filtering on the information in the at least one data packet.
7. (Previously presented) The method of claim 1 wherein the at least one programmable processing module performs a transformation on the information in the at least one data packet.
8. (Previously presented) The method of claim 1 wherein the at least one programmable processing module performs aggregation on the information in the at least one data packet.
9. (Canceled)
10. (Previously presented) The method of claim 1 wherein the first module can instantiate new processing modules dynamically.
11. (Previously presented) The method of claim 1 wherein the network is a Gigabit Ethernet network.
12. (Previously presented) The method of claim 11 wherein the at least one data packet is an Internet Protocol datagram.
13. (Currently amended) An apparatus for monitoring traffic in a network comprising:
 - a network interface receiving at least one data packet, said network interface comprising:
 - (a) a first module handling communications between the network and a host, and

(b) at least one programmable processing module in communication with the first module and processing information in the at least one data packet to generate network information, wherein the first module ~~can~~ passes parameters to the at least one programmable processing module, thereby changing the processing performed by the at least one programmable processing module.

14. (Previously presented) The apparatus of claim 13 wherein the network information can be relayed from the network interface to the host.

15. (Previously presented) The apparatus of claim 14 wherein the at least one programmable processing module is generated from a processing query expressed in a high-level language.

16. (Previously presented) The apparatus of claim 15 wherein the processing query accesses functions defined in the first module.

17. (Previously presented) The apparatus of claim 14 wherein the network information is condensed statistics of network performance.

18. (Previously presented) The apparatus of claim 13 wherein the at least one programmable processing module performs filtering on the information in the at least one data packet.

19. (Previously presented) The apparatus of claim 13 wherein the at least one programmable processing module performs a transformation on the information in the at least one data packet.

20. (Previously presented) The apparatus of claim 13 wherein the at least one programmable processing module performs aggregation on the information in the at least one data packet.

21. (Canceled)

22. (Previously presented) The apparatus of claim 13 wherein the first module can instantiate new processing modules dynamically.

23. (Previously presented) The apparatus of claim 13 wherein the network is a Gigabit Ethernet network.

24. (Previously presented) The apparatus of claim 23 wherein the data packet is an Internet Protocol datagram.